

Appl No. 09/445,278

Amdt. Dated Aug. 22, 03

Reply to the Office action of April 22, 2003

Amendments to the Claims:

Kindly CANCEL claim 24 without prejudice to the subject matter involved and kindly amend claims 22, 23 and 28 – 31 as indicated in the listing below. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 21 (canceled)

Claim 22 (amended) A method for verifying the resistance status of a field-grown plant exhibiting a resistance phenotype, comprising

- (a) exposing a population of plants to a pesticidal compound or a plant pathogen under field conditions;
- (b) collecting those field-grown plants that exhibit a resistance phenotype under field conditions;
- (c) obtaining plant cuttings from a mother plant collected in step (b) by:
 - (i) cutting a short segment from basal segment of a monocotyledonous mother plant or above ground nodal sections of a dicotyledonous mother plant, wherein these plant cuttings optionally comprise roots and are mother plant such that said segment comprises a short root and shoot fragment and is capable of directly regenerating into a whole and morphologically normal plant,
 - (ii) directly transferring said excised segment plant cutting to a suitable anchorage material; and
- (d) asexually propagating progeny plant(s) from the plant cuttings obtained in step (c) without passing through a callus phase or involving cell or protoplast culture;
- (e) incorporating the so obtained progeny plant into a plant screening program between about 7 days to about 14 days after obtaining the plant cuttings, wherein the progeny plant is treated with a pesticidal compound or a plant pathogen; and
- (f) monitoring the progeny plant for resistance symptoms.

App No. 09/145,278

Amdt. Dated Aug. 22, 03

Reply to the Office action of April 22, 2003

Claim 23 (amended) A method according to claim 22, wherein said segment comprises a region that contains a high amount of actively dividing cells plant cuttings have about the minimal size still retaining its capability of regenerating into a whole plant.

Claim 24 (canceled)

Claim 25 (original 1/27/03) A method according to claim 22, wherein the anchorage material is

- (a) an inert material such as vermiculite, perlite or plastic beads;
- (b) a culture medium commonly applied in plant cultivation; or
- (c) soil.

Claim 26 (original 1/27/03) A method according to claim 22 wherein said method is used within a high through-put format.

Claim 27 (original 1/27/03) A method according to claim 22, wherein the order of steps (d) and (e) is such that the plant cuttings obtained in step (c) first are

- (i) dipped into a known concentration(s) of a pesticide-containing solution; or, in the alternative,
- (ii) sprayed with a known concentration(s) of a pesticide-containing solution before progeny plant(s) are asexually propagated from the plant cuttings.

Claim 28 (amended) A method according to claim 22, wherein the pesticide pesticidal compound is selected from the group consisting of a herbicide, an insecticide and a fungicide.

Claim 29 (amended) A method according to claim 22, wherein the field-grown plant to be tested is a weed plant.

Claim 30 (amended) A method according to claim 22, wherein the field-grown plant to be tested is a crop plant.

Claim 31 (amended) A method according to claim 22, wherein the field-grown plant to be tested is a transgenic plant.